

REMARKS

The Applicants appreciate the Examiner's careful examination of this case. Reconsideration and re-examination are respectfully requested in view of the instant remarks.

The Applicants agree with paragraphs 1 and 2 of the Office Action.

With respect to paragraphs 3 and 4 of the Office Action, the Examiner continues to reject the claims 6 — 11 by combining Sussman et al. (US 5,886,960) in view of Lyons (US 6,734,911)

Claim 6

The Examiner states that Sussman et al. discloses

"a method of operating image display apparatus, which method comprises combining electronically in a common pixel format a low resolution image component from a first source, and a high resolution image component from a second source which is different from the first source (the images sensed by the image sensor combined to form a composite image; see abstract; col. 5, lines 48 - 50);....."

The Abstract states:

"An image input device is provided in which an optical deflector is positioned to divide the image of an object into a plurality of sub-

images and to deflect the sub-images to an image sensor via an imaging lens. The images sensed by the image sensor are stored in a memory and combined by an image processor to form a composite image of the object....."

The Abstract thus discloses an image input device and not image display apparatus. Furthermore, Sussman et al at col. 1, lines 9-14 describes the invention as follows:

"The present invention relates to an imaging system for selectively providing either a low resolution real-time image or a high resolution scanned image. More particularly, the invention relates to a camera-like imaging system in which high resolution digital capture of an image is provided by combining a series of sequentially obtained sub-images."

Sussman et al is able to provide either a low resolution digital image or a high resolution image. The high resolution image is obtained by obtaining a series of partial images of equal resolution of the object (they are all obtained by the same image sensor) and combining by tiling or stitching together into the complete high resolution image of the object. Low resolution images are tiled together to form the high resolution image. The low resolution images which are combined are all obtained from the same source, the image sensor.

The low resolution image of the object is also obtained from this same image sensor.

Therefore Sussman et al does not disclose the Applicant's invention as Sussman et al actually discloses a "camera-like" imaging system and not image display apparatus able to display images which can be viewed by a user.

The Examiner continues:

".....Lyons teaches the common pixel format (a central portion) is the pixel format of a high resolution image which forms the second source (a narrow angle view) and from which the high resolution narrow field of view image component is obtained (col. 3, lines 25 - 32; col. 8, lines 33 - 35),

Again Lyons discloses a camera and not image display apparatus. The narrow field of view central portion of the image obtained by Lyons is achieved as a result of an optical element, i.e. lens, being placed in front of the camera image sensor. Any narrow field of view image is only obtained in the central portion of the sensor.

The image information recorded is actually all recorded at the same resolution as it is recorded on a single image sensor, (see Figure 1, item 43). It is the amount of information fed to each part of the image sensor which is varied by the optical device placed in front of the camera. Each portion sees a different field of view. The optical device or lens can only define a central area as having any different properties to the remainder of the image obtained. The camera has

to be moved in order move this central area, but this central area always remains in the central location with respect to the image sensor.

The Examiner continues:

"..... and Sussman et al teaches whereby the high resolution image component is able to be positioned anywhere in a display obtained from the image display apparatus (col. 15, lines 33 - 46)"

Sussman et al (col. 15, lines 33 - 46) refers to Figure 14 and describes target patterns and spacings but does not give any indication that the high resolution component can be positioned anywhere in a display. This reference does not appear to be relevant to any argument. As mentioned previously, Sussman et al does not disclose image display apparatus but discloses a "camera-like" device.

It would not be obvious to one of ordinary skill to combine Sussman et al with Lyons to arrive at the Applicant's Invention, because both citations disclose methods and technology to obtain images, using cameras or camera-like equipment and do not disclose image display apparatus. Sussman et al and Lyons both disclose single image sensor devices each able to obtain or record an image at a single resolution.

Claim 11

As mentioned previously Sussman et al and Lyons do not disclose the Applicant's invention as they disclose image capture or recording apparatus

which in each case uses a single image sensor to record the image. They do not disclose image display apparatus for displaying an image which can be viewed by the user.

Claims 7-10

The re-sampling disclosed by Sussman et al is not used to increase the pixel count of the low resolution image to that of the high resolution imagery but is used to "reconstruct the intensity of the pixel at [u,v] by appropriately weighting neighbouring pixels in the input image." (col. 18, lines 20 - 24)

The re-sampling disclosed by Sussman et al is used specifically to reconstruct the intensity of image pixels after the image has been warped to enable the sub- images to be tiled or stitched together to form the larger image.

Sussman et al does use a frame buffer, but does not disclose driving a matrix of display devices. Sussman et al discloses a method in which the pixel elements are stored in matrix elements two pixels wide in both column and row elements. This is describing the method in which the pixel elements are stored within the frame buffer. Sussman et al does not disclose or mention a matrix of display devices. A matrix of display devices of the present application is two or more display devices arranged in a matrix each device being able to display part of the overall image viewed by the user.

With regard to paragraph 5 of the Office Action, the Applicant's have dealt above with the new ground(s) of rejection.

Accordingly, it is respectfully submitted that this application is in condition for allowance. Early and favorable action is respectfully requested.

If for any reason this **RESPONSE** is found to be **INCOMPLETE**, or if at any time it appears that a **TELEPHONE CONFERENCE** with Counsel would help advance prosecution, please telephone the undersigned or one of his associates, collect in Waltham, Massachusetts, at (781) 890-5678.

Respectfully submitted,

T. Thork
Thomas E. Thompkins, Jr.
Reg. No. 47,136